Claims (clean version encompassing amendments)

What is claimed is:

- (once amended) In a method for selectively enriching/removing a serum albumin from a mixture of other compounds by contacting said mixture with a ligand (= X), the improvement comprising said ligand
 - a) having affinity for and enabling binding of the serum albumin and
 - b) being attached via a spacer (= B) to a base matrix (= M') insoluble in the aqueous media used, the matrix with the attached ligand being represented by

M-B-X

where M is the matrix, B is the spacer and X the affinity ligand, with the provision that M may contain further groups X linked via a spacer, characterized in that said ligand X has been selected among serum albumin-binding structures complying with the formulae

R₃

in which

- a) the free valence bind to the spacer B;
- b) R₁₋₄ are selected from hydrogen, electron-withdrawing groups, such as halogens and lower alkyl groups (C₁₋₁₀) that possibly are substituted with electron withdrawing groups, such as halogens;
- c) Z and Y are selected among oxygen, sulphur or nitrogen, with the provision that the nitrogen may carry a positive charge.
- 2. The method according to claim 1, **characterized** in that contact between the mixture and the media M-B-X is done in an aqueous media having a pH at which the -B-X carries a positive charge.

- 3. (once amended) The method according to claim 1, **characterized** in that at least one of R1-4 exhibit an electron withdrawing group, preferably selected among halogens such as fluorine.
- 4. (once amended) The method according to claim 1, **characterized** in that the spacer has a sulphur atom next to X.
- 5. (once amended) The method according to claim 1, **characterized** in that Z and Y are nitrogens, one of which binding to a hydrogen and the ligand structure being charged depending of pH.
- 6. (once amended) The method of claim 1, **characterized** in that said mixture derives from a host in which said serum albumin is human serum albumin.
- 7. (once amended) The method of claim 1, **characterized** in that said ligand is attached covalently to said matrix.
- 8. (once amended) The method of claim1, **characterized** in that after the adsorption step said serum albumin is eluted from said affinity adsorbent and if necessary further processed.
- 9. A method for screening ligands structures that, when attached to an affinity matrix, selectively bind albumin, characterized that water-soluble compounds that exhibit a benzene ring fused to a 5-membered heterocycle containing two or three heteroatoms, preferably two, selected from nitrogen, oxygen and sulphur after having been attached to a matrix, preferably in the 2-position, are screened for selective binding to albumin.

10. The method of claim 9, characterized in that screening is taking place in aqueous solutions at a pH at which the ligand structure including and spacer binding to the matrix is positively charged.